INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

February 5, 2004

TO: Interested Parties / Applicant

RE: Daramic, Inc. / SSM 061-18102-00012

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER.dot 9/16/03

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February 5, 2004

Jean Francois Salvi
Daramic, Inc.
3430 Cline Road,
Corydon, IN 47112

Re: 061-18102-00012
Significant Source Modification to:
Part 70 permit No.: T061-5983-00012

Dear Mr. Salvi:

Daramic, Inc. was issued Part 70 operating permit T061-18102-00012 on September 7, 1999 for the operation of battery separator manufacturing plant. An application to modify the source was received on November 3, 2003. Pursuant to 326 IAC 2-7-10.5 the following units are approved for modification at the source:

(a) One (1) polyethylene weigh bin line 3 with maximum weighing capacity of 345 pounds per hour, equipped with a baghouse for particulate control and exhausting through one (1) stack identified as F05.1.

(b) One (1) silica weigh bin line 3 with maximum weighing capacity of 800 pounds per hour, equipped with a baghouse for particulate control and exhausting through one (1) stack identified as F01.1.

(c) One (1) polyethylene weigh bin line 4 with maximum weighing capacity of 345 pounds per hour, equipped with a baghouse for particulate control and exhausting through one (1) stack identified as F05.2.

(d) One (1) silica weigh bin line 4 with maximum weighing capacity of 800 pounds per hour, equipped with a baghouse for particulate control and exhausting through one (1) stack identified as F01.2.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).

2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

The source may begin construction when the significant source modification has been issued and operation when the significant permit modification (061-18102-00012) has been issued. Operating conditions shall be incorporated into the Part 70 operating permit as a significant permit modification accordance with 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call Adeel Yousuf at (973) 575-2555, ext. 3252, or call (800) 451-6027, press 0 and ask for extension 3-6878.

Sincerely,

Original signed by Paul Dubenetzky
Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

Attachments
AY/EVP
cc: File - Harrison County
Harrison County Health Department
Air Compliance Section Inspector - Ray Schick
Compliance Data Section - Karen Ampil
Technical Support and Modeling - Michele Boner

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PART 70 OPERATING PERMIT
OFFICE OF AIR QUALITY

Daramic, Inc.
3430 Cline Road
Corydon, Indiana 47112-8706

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

First Significant Source Modification: 061-18102-00012	
Issued by:Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: February 5, 2004

SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

The Permittee owns and operates a stationary battery separator manufacturer.

Responsible Official:	Robert D. Hutchinson
Source Address:	3430 Cline Road, Corydon, Indiana 47112-8706
Mailing Address:	3430 Cline Road, Corydon, Indiana 47112-8706
SIC Code:	3089
County Location:	Harrison
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source, under PSD; Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(a) Sub-Micro (SM) Line 3, installed in 1979, and Sub-Micro (SM) Line 4, installed in 1984,consist of the following equipment:

(1) Four (4) silos, identified as Unit ID #'s 4.1-4.4, used to store either polyethylene or silica, each with a maximum storage capacity of 168, 168, 75, and 75 tons, respectively, each utilizing a bin filter (Unit ID #'s 4.1-4.4) for particulate matter control, each exhausting through one (1) stack, identified as S/V ID #'s 4, 5, 6, and 7, respectively;

(2) Two (2) day bins, identified as Unit ID #'s 6.1 and 6.2, used to store silica and polyethylene, respectively, each with a maximum storage capacity of 2.4 and 0.125 tons, respectively, each utilizing a bin filter (Unit ID #'s 6.1 and 6.2) for particulate matter control, each exhausting through one (1) stack, identified as S/V ID #'s 10 and 11, respectively;

(3) One (1) silo dense phase transporter, identified as Unit ID #3.1, constructed in 1979, used to convey polyethylene and silica from rail cars to silo #'s 4.1-4.5, utilizing a baghouse (Unit ID # 3.1) for particulate control, exhausting through one (1) stack, identified as S/V ID #3;

(4) One (1) silica transporter, identified as Unit ID # 5.1, constructed in 1979, used to convey silica from silos 4.3, 4.4, and 4.5 to silica day bin # 6.1, utilizing a baghouse (Unit # 5.1) for particulate matter control, each exhausting through one (1) stack, identified as S/V ID # 9;

(5) Two (2) oil extraction systems, identified as Unit ID #'s 9.1 and 9.2, each system includes oil extraction pans, a solvent drying oven, a water drying oven, and a distillation unit, utilizing a carbon adsorber to control volatile organic compounds and trichloroethylene, exhausting through one (1) stack, identified as S/V ID # 17;

(6) Three (3) tanks, identified as Unit ID #'s 11.1, 11.2, and 11.3, each constructed in 1979, each used to store trichloroethylene, miscella and process oil, respectively, each with a maximum storage capacity of 10,576 gallons, each utilizing a carbon adsorber to control volatile organic

compounds and trichloroethylene, exhausting through one (1) stack, identified as S/V ID #17;

(7) Two (2) extruders, identified as Unit ID #'s 8.1 and 8.2;

(8) Two (2) aerosol addition systems, identified as Unit ID #'s 10.1, 10.2;

(b) Sub-Micro (SM) Line 6, installed in 1991, consists of the following equipment:

(1) One (1) silo, identified as Unit ID # 4.5, used to store silica, with a maximum storage capacity of 75 tons, utilizing a bin filter (Unit ID # 4.5) for particulate matter control, exhausting through one (1) stack, identified as S/V ID # 8;

(2) Two (2) day bins, identified as Unit ID #'s 7.1 and 7.2, used to store silica and polyethylene, respectively, each with a maximum storage capacity of 2.4 and 0.125 tons, respectively, each utilizing a bin filter (Unit ID #'s 7.1 and 7.2) for particulate matter control, each exhausting through one (1) stack, identified as S/V ID #'s 12 and 13, respectively;

(3) One (1) oil extraction system, identified as Unit ID # 9.3,system includes oil extraction pans, a solvent drying oven, a water drying oven, and a distillation unit, utilizing a carbon adsorber to control volatile organic compounds and trichloroethylene, exhausting through one (1) stack, identified as S/V ID # 17;

(4) Three (3) tanks, identified as Unit ID #'s 11.4, 11.5, and 11.6, each constructed in 1991, each used to store trichloroethylene, miscella and process oil, respectively, each with a maximum storage capacity of 9,989 gallons, each utilizing a carbon adsorber to control volatile organic compounds and trichloroethylene, exhausting through one (1) stack, identified as S/V ID #17;

(5) One (1) extruder, identified as Unit ID # 8.3;

(6) One (1) aerosol addition system, identified as Unit ID # 10.3;

(c) Two (2) boilers, identified as Unit ID #'s 1.1 and 2.1, constructed in 1979 and 1991, respectively, each with a maximum heat input capacity of 12.553 and 20.922 MMBtu per hour, respectively, each combusting natural gas or No. 2 fuel oil, each exhausting through one (1) stack, identified as S/V ID #'s 1 and 2, respectively; and

(d) One (1) tank, identified as Unit #11.7, constructed in 1991, used to store virgin oil, with a maximum storage capacity of 14,384 gallons.

(e) One (1) silo dilute phase transporter, identified as Unit ID #13, used to convey polyethylene pneumatically from rail cars to a silo, utilizing a bin filter for particulate control and exhausting through one (1) stack, identified as S/V ID #20.

(f) One (1) polyethylene weigh bin line 3 with maximum weighing capacity of 345 pounds per hour, equipped with a baghouse for particulate control and exhausting through one (1) stack identified as F05.1.

(g) One (1) silica weigh bin line 3 with maximum weighing capacity of 800 pounds per hour, equipped with a baghouse for particulate control and exhausting through one (1) stack identified as F01.1.

(h) One (1) polyethylene weigh bin line 4 with maximum weighing capacity of 345 pounds per hour, equipped with a baghouse for particulate control and exhausting through one (1) stack identified as F05.2.

(i) One (1) silica weigh bin line 4 with maximum weighing capacity of 800 pounds per hour, equipped with a baghouse for particulate control and exhausting through one (1) stack identified as F01.2.

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

This stationary source does not currently have any insignificant activities, as defined in 326 IAC 2-7-1 (21) that have applicable requirements.

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION D.7 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(a) One (1) polyethylene weigh bin line 3 with maximum weighing capacity of 345 pounds per hour, equipped with a baghouse for particulate control and exhausting through one (1) stack identified as F05.1.

(b) One (1) silica weigh bin line 3 with maximum weighing capacity of 800 pounds per hour, equipped with a baghouse for particulate control and exhausting through one (1) stack identified as F01.1.

(c) One (1) polyethylene weigh bin line 4 with maximum weighing capacity of 345 pounds per hour, equipped with a baghouse for particulate control and exhausting through one (1) stack identified as F05.2.

(d) One (1) silica weigh bin line 4 with maximum weighing capacity of 800 pounds per hour, equipped with a baghouse for particulate control and exhausting through one (1) stack identified as F01.2.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 Particulate [326 IAC 6-3]

The particulate emissions from the emission units listed in the table below shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The allowable emissions for each facility operating at its maximum process weight rate are as follows:

Facilities	Process Weight Rate (tons/hr)	PM Allowable Emissions (lb/hr)
Polyethylene weigh bin line 3 (F05.1)	0.1725	1.26
Silica weigh bin line 3 (F01.1)	0.40	2.20
Polyethylene weigh bin line 4 (F05.2)	0.1725	1.26
Silica weigh bin line 4 (F01.2)	0.40	2.20

D.7.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and its control devices.

Compliance Determination Requirements

D.7.3 Particulate Matter (PM)

In order to comply with condition D.7.1, the baghouses for particulate control identified as F05.1, F01.1, F05.2 and F01.2 shall be in operation and control emissions from the polyethylene and silica weigh bin lines 3 and 4 at all times that these facilities are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.7.4 Visible Emissions Notations

(a) Visible emission notations of the F05.1, F01.1, F05.2, and F01.2 baghouse stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

D.7.5 Parametric Monitoring

The Permittee shall record the total static pressure drop across each of the baghouses identified as F05.1, F01.1, F05.2, and F01.2, at least once per shift when the systems are in operation. When for any one reading, the pressure drop across the baghouses (F05.1 and F05.2) is outside the normal range of 0.8 to 2.0 inches of water and the baghouses (F01.1 and F01.2) is outside the normal range of 2.53 to 4.0 or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.7.6 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the weigh bin lines 3 and 4. All defective bags shall be replaced.

D.7.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM,

OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

(b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.7.8 Record Keeping Requirements

(a) To document compliance with Condition D.7.4, the Permittee shall maintain records of visible emission notations of the baghouse F05.1, F01.1, F05.2, and F01.2 stack exhausts once per shift.

(b) To document compliance with Condition D.7.5, the Permittee shall maintain per shift records of the total static pressure drop during normal operation for each baghouse.

(c) To document compliance with Condition D.7.6, the Permittee shall maintain records of the results of the inspections required under Condition D.7.6.

(d) To document compliance with Condition D.7.2, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

(e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Significant Source Modification and Significant Permit Modification to a Part 70 Operating Permit

Source Background and Description

Source Name:	Daramic, Inc.
Source Location:	3430 Cline Road, Corydon, IN 47112
County:	Harrison
SIC Code:	3089
Operation Permit No.:	T061-5983-00012
Operation Permit Issuance Date:	September 7, 1999
Significant Source Modification No.:	061-18102-00012
Significant Permit Modification No.:	061-18443-00012
Permit Reviewer:	AY/EVP

The Office of Air Quality (OAQ) has reviewed a modification application from Daramic, Inc. relating to the construction and operation of polyethylene and silica weighing bin lines 3 and 4.

Explanation of Modification Requested

On November 3, 2003, Daramic, Inc. submitted an application to the OAQ requesting to add the following operations to their existing plant:

(a) One (1) polyethylene weigh bin line 3 with maximum weighing capacity of 345 pounds per hour, equipped with a baghouse for particulate control and exhausting through one (1) stack identified as F05.1.

(b) One (1) silica weigh bin line 3 with maximum weighing capacity of 800 pounds per hour, equipped with a baghouse for particulate control and exhausting through one (1) stack identified as F01.1.

(c) One (1) polyethylene weigh bin line 4 with maximum weighing capacity of 345 pounds per hour, equipped with a baghouse for particulate control and exhausting through one (1) stack identified as F05.2.

(d) One (1) silica weigh bin line 4 with maximum weighing capacity of 800 pounds per hour, equipped with a baghouse for particulate control and exhausting through one (1) stack identified as F01.2.

Note: Polyethylene and silica powder is fed into a mixer and a ribbon blender after weighing; however, since the powder is being mixed with the oil and wetting agent, there are no particulate emissions generated as a result of mixing and blending operations.

Existing Approvals

The source was issued a Part 70 Operating Permit (T061-5983-00012) on September 7, 1999. The source has since received the following:

(a) First Administrative Amendment No.: 061-11737, issued on March 16, 2000.

(b) First Minor Source Modification No.: 061-11905, issued on May 10, 2000.

(c) First Minor Permit Modification No.: 061-12134, issued on July 13, 2000.

(b) First Reopening No.: 061-13308, issued on February 7, 2002.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)*	Temperature (^{0}F)
F05.1	Polyethylene weigh bin line 3	50	0.50	410	Ambient
F01.1	Silica weigh bin line 3	50	0.75	2190	Ambient
F05.2	Polyethylene weigh bin line 4	50	0.50	410	Ambient
F01.2	Silica weigh bin line 3	50	0.75	2190	Ambient

* estimated

Recommendation

The staff recommends to the Commissioner that the Significant Source Modification and Significant Permit Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on November 3, 2003. Additional information was received on November 26, 2003.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (one (1) page).

Unrestricted Potential Emissions Due to Modification

The table reflects the unrestricted potential to emit of the proposed modification.

Pollutant	Potential To Emit (tons/year)
PM	10,031.44
PM-10	10,031.44
SO_2	0.00
VOC	0.00
CO	0.00
NO_x	0.00

There are no HAP emissions.

Justification for Modification

The Part 70 operating permit is being modified through both a Part 70 Significant Source Modification and Significant Permit Modification. These modifications are being performed based on the following justification:

(a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM and PM-10 are equal to or greater than 25 tons per year. The source is subject to the provisions of 326 IAC 2-7. Therefore, the source is subject to the provisions of 326 IAC 2-7-10.5(f)(4) for this significant source modification.

(b) The proposed operating conditions shall be incorporated into the Part 70 Operating Permit as a Significant Permit Modification (No. 045-18180-00011) in accordance with 326 IAC 2-7-12(d). The Significant Permit Modification will give the source approval to operate the proposed emission units.

County Attainment Status

The source is located in Harrison County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Harrison County has been designated as attainment or unclassifiable for ozone. Therefore, the VOC emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration, 326 IAC 2-2.

(b) Harrison County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD applicability.

Source Status

Existing Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	16.0
PM10	16.0
SO_2	0.0
VOC	0.0
CO	2.0
NO_x	8.0

(a) This existing source is not a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the 28 listed source categories.

(b) These emissions are based upon Indiana Air Emissions Summary Data for 2001.

Potential to Emit After Controls for the Modification

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units for the modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
Polyethylene weigh bin line 3 (F05.1)	1.51	1.51	--	--	--	--	--
Silica weigh bin line 3 (F01.1)	3.50	3.50	--	--	--	--	--
Polyethylene weigh bin line 4 (F05.2)	1.51	1.51	--	--	--	--	--
Silica weigh bin line 4 (F01.2)	3.50	3.50	--	--	--	--	--
Total Emissions	10.03	10.03	--	--	--	--	--
PSD Significant Threshold	25	15	40	40	100	40	N/A

This modification to an existing major stationary source is not major because the emission increase is less than the PSD significant levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Federal Rule Applicability

(a) This modification does not involve a pollutant-specific emissions unit:

(1) with the potential to emit before controls equal to or greater than one hundred (100) tons per year, and

(2) that is subject to an emission limit and has a control device that is necessary to meet that limit.

Therefore, the requirements of 40 CFR Part 64, Compliance Assurance Monitoring, are not applicable.

(b) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable for the modification to this source.

(c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 61, and 326 IAC 20 and 40 CFR Part 63) applicable for the modification to this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This modification to a PSD major source is not subject to this rule. This rule applies to modifications with the potential to emit (PTE) greater than or equal to 25 and/or 15 tons of PM and/or PM-10 per year, respectively. This modification has a controlled PTE PM/PM-10 of 10.03 tons per year. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM-10 and VOC. Pursuant to this rule, the source must annually submit an emission statement for the source. The annual statement must contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) the particulate shall be limited by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10 P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Facilities	Process Weight Rate (tons/hr)	PM Allowable Emissions (lb/hr)	Compliance Calculations (lb/hr)
Polyethylene weigh bin line 3 (F05.1)	0.1725	1.26	0.344 (controlled)
Silica weigh bin line 3 (F01.1)	0.40	2.20	0.80 (controlled)
Polyethylene weigh bin line 4 (F05.2)	0.1725	1.26	0.344 (controlled)
Silica weigh bin line 4 (F01.2)	0.40	2.20	0.80 (controlled)

The baghouses shall be in operation at all times the polyethylene and silica weigh bin lines are in operation, in order to comply with this limit.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

(1) The baghouses controlling emissions from the weigh bin lines 3 and 4, have applicable compliance monitoring conditions as specified below:

(a) Visible emission notations of the F05.1, F01.1, F05.2, and F01.2 baghouse stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

(b) The Permittee shall record the total static pressure drop across each of the baghouses identified as F05.1, F01.1, F05.2, and F01.2, at least once per shift when the systems are in operation. When for any one reading, the pressure drop across the baghouses (F05.1 and F05.2) is outside the normal range of 0.8 to 2.0 inches of water and the baghouses (F01.1 and F01.2) is outside the normal range of 2.53 to 4.0 or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

(c) An inspection shall be performed each calender quarter of all bags controlling the weigh bin lines 3 and 4. All defective bags shall be replaced.

(d) In the event that bag failure has been observed:

(1) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

(2) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

These monitoring conditions are necessary because the baghouse for weigh bin lines 3 and 4 must operate properly to ensure compliance with 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 2-2 (PSD).

Proposed Permit Changes

New equipments have been added to section A.2.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

This stationary source consists of the following emission units and pollution control devices:

(e) One (1) silo dilute phase transporter, identified as Unit ID #13, used to convey polyethylene pneumatically from rail cars to a silo, utilizing a bin filter for particulate control and exhausting through one (1) stack, identified as S/V ID #20.

(f) One (1) polyethylene weigh bin line 3 with maximum weighing capacity of 345 pounds per hour, equipped with a baghouse for particulate control and exhausting through one (1) stack identified as F05.1.

(g) One (1) silica weigh bin line 3 with maximum weighing capacity of 800 pounds per hour, equipped with a baghouse for particulate control and exhausting through one (1) stack identified as F01.1.

(h) One (1) polyethylene weigh bin line 4 with maximum weighing capacity of 345 pounds per hour, equipped with a baghouse for particulate control and exhausting through one (1) stack identified as F05.2.

(i) One (1) silica weigh bin line 4 with maximum weighing capacity of 800 pounds per hour, equipped with a baghouse for particulate control and exhausting through one (1) stack identified as F01.2.

A new D section has been added to incorporate the new constructed weigh bin lines 3 and 4 and the corresponding conditions.

SECTION D.7 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]

(a) One (1) polyethylene weigh bin line 3 with maximum weighing capacity of 345 pounds per hour, equipped with a baghouse for particulate control and exhausting through one (1) stack identified as F05.1.

(b) One (1) silica weigh bin line 3 with maximum weighing capacity of 800 pounds per hour, equipped with a baghouse for particulate control and exhausting through one (1) stack identified as F01.1.

(c) One (1) polyethylene weigh bin line 4 with maximum weighing capacity of 345 pounds per hour, equipped with a baghouse for particulate control and exhausting through one (1) stack identified as F05.2.

(d) One (1) silica weigh bin line 4 with maximum weighing capacity of 800 pounds per hour, equipped with a baghouse for particulate control and exhausting through one (1) stack identified as F01.2.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.7.1 Particulate [326 IAC 6-3]

The particulate emissions from the emission units listed in the table below shall be limited

by the following:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

The allowable emissions for each facility operating at its maximum process weight rate are as follows:

Facilities	Process Weight Rate (tons/hr)	PM Allowable Emissions (lb/hr)
Polyethylene weigh bin line 3 (F05.1)	0.1725	1.26
Silica weigh bin line 3 (F01.1)	0.40	2.20
Polyethylene weigh bin line 4 (F05.2)	0.1725	1.26
Silica weigh bin line 4 (F01.2)	0.40	2.20

D.7.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and its control devices.

Compliance Determination Requirements

D.7.3 Particulate Matter (PM)

In order to comply with condition D.7.1, the baghouses for particulate control identified as F05.1, F01.1, F05.2 and F01.2 shall be in operation and control emissions from the polyethylene and silica weigh bin lines 3 and 4 at all times that these facilities are in operation.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.7.4 Visible Emissions Notations

(a) Visible emission notations of the F05.1, F01.1, F05.2, and F01.2 baghouse stack exhausts shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1)

month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

D.7.5 Parametric Monitoring

The Permittee shall record the total static pressure drop across each of the baghouses identified as F05.1, F01.1, F05.2, and F01.2, at least once per shift when the systems are in operation. When for any one reading, the pressure drop across the baghouses (F05.1 and F05.2) is outside the normal range of 0.8 to 2.0 inches of water and the baghouses (F01.1 and F01.2) is outside the normal range of 2.53 to 4.0 or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- Compliance Response Plan - Preparation, Implementation, Records, and Reports. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.7.6 Baghouse Inspections

An inspection shall be performed each calender quarter of all bags controlling the weigh bin lines 3 and 4. All defective bags shall be replaced.

D.7.7 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

(b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or

triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.7.8 Record Keeping Requirements

(a) To document compliance with Condition D.7.4, the Permittee shall maintain records of visible emission notations of the baghouse F05.1, F01.1, F05.2, and F01.2 stack exhausts once per shift.

(b) To document compliance with Condition D.7.5, the Permittee shall maintain per shift records of the total static pressure drop during normal operation for each baghouse.

(c) To document compliance with Condition D.7.6, the Permittee shall maintain records of the results of the inspections required under Condition D.7.6.

(d) To document compliance with Condition D.7.2, the Permittee shall maintain records of any additional inspections prescribed by the Preventive Maintenance Plan.

(e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

Conclusion

The construction and operation of weigh bin lines 3 and 4 shall be subject to the conditions of the attached proposed Significant Source Modification No.: 061-18102-00012 and Significant Permit Modification No.: 061-18443-00012.

Appendix A: Emissions Calculations
Particulater Matter (PM) Emissions

Company Name: Daramic, Inc.
Address City IN Zip: 3430 Cline Road, Corydon, IN 47112
Permit No.: 061-18102-00012
Reviewer: Adeel Yousuf / EVP
Date: 12/04/03

Particulate Matter Emissions from Polyethylene Weigh Bin Line 3 (F05.1)

PM/PM10: 0.0982 gr/acf outlet x 410 acf/min x 60 min/hr / 7000 gr/lb x 4.38 ton/yr / lb/hr x 0.01 (1- control effeciency) = **1511.55 tons/yr (uncontrolled)**
where the baghouse control efficiency is listed at 99.90% **1.51 tons/yr (controlled)**

Particulate Matter Emissions from Silica Weigh Bin Line 3 (F01.1)

PM/PM10: 0.04262 gr/acf outlet x 2190 acf/min x 60 min/hr / 7000 gr/lb x 4.38 ton/yr / lb/hr x 0.01 (1- control effeciency) = **3504.17 tons/yr (uncontrolled)**
where the baghouse control efficiency is listed at 99.90% **3.50 tons/yr (controlled)**

Particulate Matter Emissions from Polyethylene Weigh Bin Line 4 (F05.2)

PM/PM10: 0.0982 gr/acf outlet x 410 acf/min x 60 min/hr / 7000 gr/lb x 4.38 ton/yr / lb/hr x 0.01 (1- control effeciency) = **1511.55 tons/yr (uncontrolled)**
where the baghouse control efficiency is listed at 99.90% **1.51 tons/yr (controlled)**

Particulate Matter Emissions from Silica Weigh Bin Line 4 (F01.2)

PM/PM10: 0.04262 gr/acf outlet x 2190 acf/min x 60 min/hr / 7000 gr/lb x 4.38 ton/yr / lb/hr x 0.01 (1- control effeciency) = **3504.17 tons/yr (uncontrolled)**
where the baghouse control efficiency is listed at 99.90% **3.50 tons/yr (controlled)**

Total: **10031.44 tons/yr (uncontrolled)**
10.03 tons/yr (controlled)

Notes:
After weighing, polyethylene and silica is fed into a mixer where oil and wetting agent is introduced into the powder. Since the oil is being mixed with the powder, there are no particulate emissions emitted during mixing and blending processes.

Methodology:
Uncontrolled PM/PM10 = grain loading (gr/acf outlet) * Flow rate (acfm) * (60 min/hr) * (1 lb/7000 gr) * 4.38 (tons/yr / lb/hr) / (1- control effeciency %)